

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/572,348  
Source: JFWP  
Date Processed by STIC: 02/08/2007

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

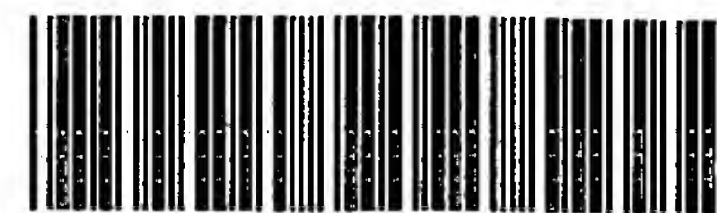
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**<http://www.uspto.gov/ebs/efs/downloads/documents.htm>**> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

## Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	SERIAL NUMBER: <u>10/572,348</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 _____ Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor <b>after</b> creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 _____ Invalid Line Length	The rules require that a line <b>not exceed</b> 72 characters in length. This includes white spaces.	
3 _____ Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do <b>not</b> use tab codes between numbers; use <b>space characters</b> , instead.	
4 _____ Non-ASCII	The submitted file was <b>not</b> saved in ASCII(DOS) text, as <b>required</b> by the Sequence Rules. <b>Please ensure your subsequent submission is saved in ASCII text.</b>	
5 _____ Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. <b>Per Sequence Rules, each n or Xaa can only represent a single residue.</b> Please present the <b>maximum</b> number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 _____ PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. <b>This applies to the mandatory &lt;220&gt;-&lt;223&gt; sections for Artificial or Unknown sequences.</b>	
7 _____ Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for <b>each</b> skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to <b>include</b> the skipped sequences.	
8 _____ Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If <b>intentional</b> , please insert the following lines for <b>each</b> skipped sequence. <210> sequence id number <400> sequence id number 000	
9 _____ Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 _____ Invalid <213> Response	<u>Per 1.823 of Sequence Rules, the only valid &lt;213&gt; responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). &lt;220&gt;-&lt;223&gt; section is required when &lt;213&gt; response is Unknown or is Artificial Sequence. (see item 11 below)</u>	
11 _____ Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules	
12 _____ PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 _____ Misuse of n/Xaa	<b>"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid</b>	



IFWP

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,348

DATE: 02/08/2007

TIME: 11:42:29

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\02082007\J572348.raw

3 <110> APPLICANT: Novo Nordisk A/S  
 5 <120> TITLE OF INVENTION: Novel GLP-1 derivatives  
 7 <130> FILE REFERENCE: 6692-WO  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/572,348  
 C--> 9 <141> CURRENT FILING DATE: 2006-03-17  
 9 <160> NUMBER OF SEQ ID NOS: 5  
 11 <170> SOFTWARE: PatentIn version 3.1  
 13 <210> SEQ ID NO: 1  
 14 <211> LENGTH: 31  
 15 <212> TYPE: PRT  
 16 <213> ORGANISM: Homo sapiens  
 18 <400> SEQUENCE: 1  
 20 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly  
 21 1 5 10 15  
 24 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly  
 25 20 25 30  
 28 <210> SEQ ID NO: 2  
 29 <211> LENGTH: 40  
 30 <212> TYPE: PRT  
 31 <213> ORGANISM: Synthetic construct  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: MISC\_FEATURE  
 35 <222> LOCATION: (1)..(1)  
 36 <223> OTHER INFORMATION: Xaa at position 1 is L-histidine, D-histidine, desamino-histidine  
 37 , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp  
 38 ha-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h  
 39 istidine, 3-pyridylalanine, 2-pyridylalanine, or 4-pyridylalanine  
 W--> 40 .  
 43 <220> FEATURE:  
 44 <221> NAME/KEY: MISC\_FEATURE  
 45 <222> LOCATION: (2)..(2)  
 46 <223> OTHER INFORMATION: Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1-aminoc  
 47 yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid,  
 48 (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy  
 49 lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc  
 W--> 50 tyl) carboxylic acid.  
 53 <220> FEATURE:  
 54 <221> NAME/KEY: MISC\_FEATURE  
 55 <222> LOCATION: (10)..(10)  
 56 <223> OTHER INFORMATION: Xaa at position 10 is Val or Leu.  
 59 <220> FEATURE:  
 60 <221> NAME/KEY: MISC\_FEATURE

Does Not Comply  
 Corrected Diskette Needed  
 (pgs 1, 5, 6)

Invalid Response.  
 L213? Responses are Artificial,  
 Unknown or Genus Species.  
 Pls see Item 10 on

See  
 Summary  
 Sheet.

61, <222> LOCATION: (12) .. (12)

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Input Set : A:\sequence\_listing.txt

Output Set: N:\CRF4\02082007\J572348.raw

62 <223> OTHER INFORMATION: Xaa at position 12 is Ser, Lys or Arg.  
65 <220> FEATURE:  
66 <221> NAME/KEY: MISC\_FEATURE  
67 <222> LOCATION: (13)..(13)  
68 <223> OTHER INFORMATION: Xaa at position 13 is Tyr or Gln.  
71 <220> FEATURE:  
72 <221> NAME/KEY: MISC\_FEATURE  
73 <222> LOCATION: (14)..(14)  
74 <223> OTHER INFORMATION: Xaa at position 14 is Leu or Met.  
77 <220> FEATURE:  
78 <221> NAME/KEY: MISC\_FEATURE  
79 <222> LOCATION: (16)..(16)  
80 <223> OTHER INFORMATION: Xaa at position 16 is Gly, Glu or Aib.  
83 <220> FEATURE:  
84 <221> NAME/KEY: MISC\_FEATURE  
85 <222> LOCATION: (17)..(17)  
86 <223> OTHER INFORMATION: Xaa at position 17 is Gln, Glu, Lys or Arg.  
89 <220> FEATURE:  
90 <221> NAME/KEY: MISC\_FEATURE  
91 <222> LOCATION: (19)..(19)  
92 <223> OTHER INFORMATION: Xaa at position 19 is Ala or Val.  
95 <220> FEATURE:  
96 <221> NAME/KEY: MISC\_FEATURE  
97 <222> LOCATION: (20)..(20)  
98 <223> OTHER INFORMATION: Xaa at position 20 is Lys, Glu or Arg.  
101 <220> FEATURE:  
102 <221> NAME/KEY: MISC\_FEATURE  
103 <222> LOCATION: (21)..(21)  
104 <223> OTHER INFORMATION: Xaa at position 21 is Glu or Leu.  
107 <220> FEATURE:  
108 <221> NAME/KEY: MISC\_FEATURE  
109 <222> LOCATION: (24)..(24)  
110 <223> OTHER INFORMATION: Xaa at position 24 is Ala, Glu or Arg.  
113 <220> FEATURE:  
114 <221> NAME/KEY: MISC\_FEATURE  
115 <222> LOCATION: (27)..(27)  
116 <223> OTHER INFORMATION: Xaa at position 27 is Val or Lys.  
119 <220> FEATURE:  
120 <221> NAME/KEY: MISC\_FEATURE  
121 <222> LOCATION: (28)..(28)  
122 <223> OTHER INFORMATION: Xaa at position 28 is Lys, Glu, Asn or Arg.  
125 <220> FEATURE:  
126 <221> NAME/KEY: MISC\_FEATURE  
127 <222> LOCATION: (29)..(29)  
128 <223> OTHER INFORMATION: Xaa at position 29 is Gly or Aib.  
131 <220> FEATURE:  
132 <221> NAME/KEY: MISC\_FEATURE  
133 <222> LOCATION: (30)..(30)  
134 <223> OTHER INFORMATION: Xaa at position 30 is Arg, Gly or Lys.

## RAW SEQUENCE LISTING

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Input Set : A:\sequence listing.txt

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137 <220> FEATURE:  
 138 <221> NAME/KEY: MISC\_FEATURE  
 139 <222> LOCATION: (31)..(31)  
 140 <223> OTHER INFORMATION: Xaa at position 31 is Gly, Ala, Glu, Pro, Lys, amide or is  
 absent  
 141  
 144 <220> FEATURE:  
 145 <221> NAME/KEY: MISC\_FEATURE  
 146 <222> LOCATION: (32)..(32)  
 147 <223> OTHER INFORMATION: Xaa at position 32 is Lys, Ser, amide or is absent.  
 150 <220> FEATURE:  
 151 <221> NAME/KEY: MISC\_FEATURE  
 152 <222> LOCATION: (33)..(33)  
 153 <223> OTHER INFORMATION: Xaa at position 33 is Ser, Lys, amide or is absent.  
 156 <220> FEATURE:  
 157 <221> NAME/KEY: MISC\_FEATURE  
 158 <222> LOCATION: (34)..(34)  
 159 <223> OTHER INFORMATION: Xaa at position 34 is Gly, amide or is absent.  
 162 <220> FEATURE:  
 163 <221> NAME/KEY: MISC\_FEATURE  
 164 <222> LOCATION: (35)..(35)  
 165 <223> OTHER INFORMATION: Xaa at position 35 is Ala, amide or is absent.  
 168 <220> FEATURE:  
 169 <221> NAME/KEY: MISC\_FEATURE  
 170 <222> LOCATION: (36)..(36)  
 171 <223> OTHER INFORMATION: Xaa at position 36 is Pro, amide or is absent.  
 174 <220> FEATURE:  
 175 <221> NAME/KEY: MISC\_FEATURE  
 176 <222> LOCATION: (37)..(37)  
 177 <223> OTHER INFORMATION: Xaa at position 37 is Pro, amide or is absent.  
 180 <220> FEATURE:  
 181 <221> NAME/KEY: MISC\_FEATURE  
 182 <222> LOCATION: (38)..(38)  
 183 <223> OTHER INFORMATION: Xaa at position 38 is Pro, amide or is absent.  
 186 <220> FEATURE:  
 187 <221> NAME/KEY: MISC\_FEATURE  
 188 <222> LOCATION: (39)..(39)  
 189 <223> OTHER INFORMATION: Xaa at position 39 is Ser, amide or is absent.  
 192 <220> FEATURE:  
 193 <221> NAME/KEY: MISC\_FEATURE  
 194 <222> LOCATION: (40)..(40)  
 195 <223> OTHER INFORMATION: Xaa at position 40 is amide or is absent.  
 198 <400> SEQUENCE: 2  
 W--> 200 Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Xaa Ser Xaa Xaa Xaa Glu Xaa  
 201 1 5 10 15  
 204 Xaa Ala Xaa Xaa Xaa Phe Ile Xaa Trp Leu Xaa Xaa Xaa Xaa Xaa Xaa  
 205 20 25 30  
 208 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 209 35 40  
 212 <210> SEQ ID NO: 3



## RAW SEQUENCE LISTING

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Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\02082007\J572348.raw

213 <211> LENGTH: 32  
 214 <212> TYPE: PRT  
 215 <213> ORGANISM: Synthetic construct → Same Error  
 217 <220> FEATURE:  
 218 <221> NAME/KEY: MISC\_FEATURE  
 219 <222> LOCATION: (1)..(1)  
 220 <223> OTHER INFORMATION: Xaa at position 1 is L-histidine, D-histidine, desamino-histidine  
 221 , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp  
 222 ha-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h  
 223 istidine, 3-pyridylalanine, 2-pyridylalanine, or 4-pyridylalanine  
 W--> 224 .  
 227 <220> FEATURE:  
 228 <221> NAME/KEY: MISC\_FEATURE  
 229 <222> LOCATION: (2)..(2)  
 230 <223> OTHER INFORMATION: Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1-aminoc  
 231 yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid,  
 232 (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy  
 233 lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc  
 W--> 234 tyl) carboxylic acid.  
 237 <220> FEATURE:  
 238 <221> NAME/KEY: MISC\_FEATURE  
 239 <222> LOCATION: (12)..(12)  
 240 <223> OTHER INFORMATION: Xaa at position 12 is Ser, Lys or Arg.  
 243 <220> FEATURE:  
 244 <221> NAME/KEY: MISC\_FEATURE  
 245 <222> LOCATION: (16)..(16)  
 246 <223> OTHER INFORMATION: Xaa at position 16 is Gly, Glu or Aib.  
 249 <220> FEATURE:  
 250 <221> NAME/KEY: MISC\_FEATURE  
 251 <222> LOCATION: (17)..(17)  
 252 <223> OTHER INFORMATION: Xaa at position 17 is Gln, Gly, Lys or Arg.  
 255 <220> FEATURE:  
 256 <221> NAME/KEY: MISC\_FEATURE  
 257 <222> LOCATION: (20)..(20)  
 258 <223> OTHER INFORMATION: Xaa at position 20 is Lys, Glu or Arg.  
 261 <220> FEATURE:  
 262 <221> NAME/KEY: MISC\_FEATURE  
 263 <222> LOCATION: (24)..(24)  
 264 <223> OTHER INFORMATION: Xaa at position 24 is Ala, Glu or Arg.  
 267 <220> FEATURE:  
 268 <221> NAME/KEY: MISC\_FEATURE  
 269 <222> LOCATION: (28)..(28)  
 270 <223> OTHER INFORMATION: Xaa at position 28 is Lys, Glu or Arg.  
 273 <220> FEATURE:  
 274 <221> NAME/KEY: MISC\_FEATURE  
 275 <222> LOCATION: (29)..(29)  
 276 <223> OTHER INFORMATION: Xaa at position 29 is Gly or Aib.  
 279 <220> FEATURE:  
 280 <221> NAME/KEY: MISC\_FEATURE

## RAW SEQUENCE LISTING

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Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\02082007\J572348.raw

281 <222> LOCATION: (30)..(30)  
 282 <223> OTHER INFORMATION: Xaa at position 30 is Arg or Lys..  
 285 <220> FEATURE:  
 286 <221> NAME/KEY: MISC\_FEATURE  
 287 <222> LOCATION: (31)..(31)  
 288 <223> OTHER INFORMATION: Xaa at position 31 is Gly, Ala, Glu or Lys.  
 291 <220> FEATURE:  
 292 <221> NAME/KEY: MISC\_FEATURE  
 293 <222> LOCATION: (32)..(32)  
 294 <223> OTHER INFORMATION: Xaa at position 32 is Lys, amide or is absent.  
 297 <400> SEQUENCE: 3  
 W--> 299 Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Xaa Tyr Leu Glu Xaa  
 300 1 5 10 15  
 303 Xaa Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Xaa Xaa Xaa Xaa Xaa  
 304 20 25 30  
 307 <210> SEQ ID NO: 4  
 308 <211> LENGTH: 39  
 309 <212> TYPE: PRT  
 310 <213> ORGANISM: Gila monster  
 312 <220> FEATURE:  
 313 <221> NAME/KEY: MISC\_FEATURE  
 314 <222> LOCATION: (39)..(39)  
 315 <223> OTHER INFORMATION: Amidation of carboxy group.  
 318 <400> SEQUENCE: 4  
 320 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 321 1 5 10 15  
 324 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 325 20 25 30  
 328 Ser Gly Ala Pro Pro Pro Ser  
 329 35  
 332 <210> SEQ ID NO: 5  
 333 <211> LENGTH: 44  
 334 <212> TYPE: PRT  
 335 <213> ORGANISM: Synthetic construct  
 337 <220> FEATURE:  
 338 <221> NAME/KEY: MISC\_FEATURE  
 339 <222> LOCATION: (44)..(44)  
 340 <223> OTHER INFORMATION: Amidation of carboxy group.  
 343 <400> SEQUENCE: 5  
 345 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 346 1 5 10 15  
 349 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 350 20 25 30  
 353 Ser Gly Ala Pro Pro Ser Lys Lys Lys Lys Lys  
 354 35 40

*same error*



RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/572,348

DATE: 02/08/2007  
TIME: 11:42:30

Input Set : A:\sequence listing.txt  
Output Set: N:\CRF4\02082007\J572348.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 1,2,10,12,13,14,16,17,19,20,21,24,27,28,29,30,31,32,33,34

Seq#:2; Xaa Pos. 35,36,37,38,39,40

Seq#:3; Xaa Pos. 1,2,12,16,17,20,24,28,29,30,31,32

## VERIFICATION SUMMARY

DATE: 02/08/2007

PATENT APPLICATION: US/10/572,348

TIME: 11:42:30

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\02082007\J572348.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No  
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:40 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:50 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
M:341 Repeated in SeqNo=2  
L:224 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:234 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
M:341 Repeated in SeqNo=3